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What is claimed is:

1. A purified protein comprising an amino acid sequence selected from:
 - a) a protein having an amino acid sequence of SEQ ID NO:1;
 - b) a protein with 90% identity to the amino acid sequence of SEQ ID NO:1 which binds R5844
antiserum;
 - c) an antigenic determinant of the protein consisting of residues 121 to 130 of SEQ ID NO:1; and
 - d) a biologically active portion of the protein selected from residues 1-350, 173-353, and 332-657 of
SEQ ID NO:1.
2. A composition comprising the protein of claim 1 and a pharmaceutical carrier.
3. A method for using a protein to screen a plurality of molecules or compounds to identify at least one
ligand, the method comprising:
 - a) combining the protein of claim 1 with the molecules or compounds under conditions to allow
specific binding; and
 - b) detecting specific binding, thereby identifying a ligand which specifically binds the protein.
4. The method of claim 3 wherein the molecules or compounds are selected from DNA molecules,
RNA molecules, peptide nucleic acids, peptides, proteins, mimetics, agonists, antagonists, inhibitors, and
drugs.
5. A method of using a polypeptide to purify a molecule or compound which specifically binds the
polypeptide, the method comprising:
 - a) combining the polypeptide of claim 1 with a sample under conditions to allow specific binding;
 - b) recovering the bound-polypeptide; and
 - c) separating the polypeptide from the molecule or compound, thereby obtaining purified molecule
or compound.
6. An array containing the protein of claim 1.
7. A method of using a protein to prepare and purify a polyclonal antibody comprising:
 - a) immunizing a animal with a protein of claim 1 under conditions to elicit an antibody response;
 - b) isolating animal antibodies;
 - c) attaching the protein to a substrate;
 - d) contacting the substrate with isolated antibodies under conditions to allow specific binding to the
protein;
 - e) dissociating the antibodies from the protein, thereby obtaining purified polyclonal antibodies.
8. A method of using a protein to prepare a monoclonal antibody comprising:
 - a) immunizing a animal with a protein of claim 1 under conditions to elicit an antibody response;

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b) isolating antibody producing cells from the animal;
c) fusing the antibody producing cells with immortalized cells in culture to form monoclonal antibody producing hybridoma cells;

d) culturing the hybridoma cells; and

e) isolating from culture monoclonal antibodies which specifically bind the protein.

9. A method for using a protein to screen a plurality of antibodies to identify an antibody which specifically binds the protein, the method comprising:

a) contacting a plurality of antibodies with the protein of claim 1, under conditions to form an antibody:protein complex, and

b) dissociating the antibody from the antibody:protein complex, thereby obtaining an antibody which specifically binds the protein.

10. A method for testing a molecule or compound for effectiveness as an agonist, the method comprising:

a) exposing a sample comprising a protein of claim 1 to a molecule or compound, and

b) detecting agonist activity in the sample.

11. A method for testing a molecule or compound for effectiveness as an antagonist, the method comprising:

a) exposing a sample comprising a protein of claim 1 to a molecule or compound, and

b) detecting antagonist activity in the sample.

12. An antibody which specifically binds the protein of claim 1

13. A method for using an antibody to detect expression of a protein in a sample, the method comprising

a) combining the antibody of claim 12 with a sample under conditions which allow the formation of antibody:protein complexes; and

b) detecting complex formation, wherein complex formation indicates expression of the protein in the sample.

14. The method of claim 13 wherein complex formation is compared with standards and is diagnostic of lung cancer.

15. The method of claim 13 wherein complex formation is compared with standards and is diagnostic of eosinophilia.

16. A composition comprising an antibody of claim 12 and a labeling moiety.

17. A method for using an antibody to immunopurify a protein, the method comprising:

a) attaching an antibody of claim 12 to a substrate,

b) exposing the antibody to a sample containing protein under conditions to allow antibody:protein

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complexes to form,

- c) dissociating the protein from the complex, and
 - d) collecting the purified protein.
18. An array containing the antibody of claim 12.